

WHAT IS CLAIMED IS:

1. A sliding miter saw for sawing a workpiece comprising:

a saw unit including

a motor including an armature which has a first rotating axis and which is connected to the saw blade via a transmission device and

a saw blade having a second rotating axis, wherein said first rotating axis is parallel with and spaced apart from the second rotating axis;

a base device including

a base and

a turntable which is pivotally connected to the base so as to rotate the saw unit between a non-mitering position and a mitering position;

a bracket for mounting the saw unit which is rotatable about an axis to move the saw unit between an elevated, non-working position and a non-elevated working position;

a supporting member to an upper portion of which is pivotally joined a rear end portion of the bracket;

a guiding groove extending along the turntable in a substantial diametrical direction; and

a ram slideably received in the guiding groove, wherein a rear end portion of the ram is pivotally joined to a lower end portion of the supporting member.

2. The sliding miter saw of claim 1, wherein the guiding groove extends fully along the diametrical direction of the turntable and a front end portion of the ram extends beyond the edge of the turntable when the ram is at its extreme position.

3. The sliding miter saw of claim 1, wherein an elongate slot in a front portion of the ram receives the saw blade when the saw unit is moved to the non-elevated working position.

4. The sliding miter saw of claim 1, wherein opposing edges of the upper surface of the base pivotally connect to a first end portion of horizontally disposed first and second additional supporting members respectively, and wherein the second end portion of the additional supporting members extends beyond the base.

5. The sliding miter saw of claim 4, wherein an elastic member provided on the additional supporting member biases the second end portion of the additional supporting member towards its extreme position.

6. The sliding miter saw of claim 4, wherein the upper surface of the base is provided with a guiding channel for guiding the additional

supporting member in a substantially circumferential direction through the action of a supporting foot which is moveably received in the guiding channel.

7. The sliding miter saw as claimed in claim 1 further comprising restraining means for vertically restraining the ram in the guiding groove.

8. A sliding miter saw comprising:

a base device including a base and a turntable which is pivotally connected with said base, the turntable provided with a guiding groove in a substantial diametrical direction;

a motor including an armature which has a first rotating axis;

a saw blade having a second rotating axis;

a bracket for a saw unit, on which said saw blade and said motor are provided, said first rotating axis is parallel with and spaced from said second rotating axis, said motor is connected with said saw blade via transmission device;

a supporting member, on which a hinge pivot shaft is provided and said bracket for the saw unit hinging with said supporting member;

a ram slideable received in said guiding groove,

wherein a rear end portion of said ram is pivotally joined with a lower end portion of said supporting member, a rear end portion of said bracket

for saw unit is pivotally joined with a upper portion of said supporting member.